

## PATENT ABSTRACTS OF JAPAN

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## (54) PRODUCTION OF MAGNESIUM HYDROXIDE

## (57)Abstract:

PURPOSE: To improve the crystal growth property by allowing quick lime to react with an aq. soln. contg. ions of Cl, Br, NO<sub>3</sub>, etc., allowing the obtained slaked lime to react with MgCl<sub>2</sub> or Mg(NO<sub>3</sub>)<sub>2</sub> in a specified equivalent ratio and further hydrothermally treating the reaction product.

CONSTITUTION: Quick lime is allowed to react with an aq. soln. of NaCl, KBr, KNO<sub>3</sub>, etc., contg. about 0.1–5mol/l of ≥1 kind among Cl, Br and NO<sub>3</sub> ions at about 10–65° C, and a slurry at pH 11–11.8 contg. the slaked lime shown by formula I is obtained (A– is Cl, Br and NO<sub>3</sub> ions, etc., and 0<x<0.1). About 0.5–0.95 equivalents of the slurry is allowed to react with one equivalent of MgCl<sub>2</sub> or Mg(NO<sub>3</sub>)<sub>2</sub> in an aq. medium to form a basic MgCl<sub>2</sub> or basic Mg(NO<sub>3</sub>)<sub>2</sub> shown by formula II (A is Cl and NO<sub>3</sub>, 0<x<0.2, and m is 0–6), the product is hydrothermally treated at about 150–250° C, and the Mg(OH)<sub>2</sub> having about 1–10m<sup>2</sup>/g specific surface, about 0.5–5μm crystal grain diameter and 0.5–5μm average secondary grain diameter and almost without being aggregated is obtained.

